

9P16394

PATENTS
Docket No. NaPro-3 CON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : May et al.
Application No.: 10/082,476 Confirmation No.: 4408
Filed : February 20, 2002
For : CELL-FREE ASSAY FOR PLANT GENE
TARGETING AND CONVERSION
Group Art Unit : 1634

Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER FOR
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Transmitted herewith is a Supplemental Information Disclosure Statement in the above-identified application. This Statement is submitted more than three months from the application filing date and after the mailing date of the first Office Action on the merits, but before the mailing date of either a final action under 37 C.F.R. § 1.113, or a notice of allowance under 37 C.F.R. § 1.311.

In accordance with 37 C.F.R. § 1.97, this Statement is accompanied by:

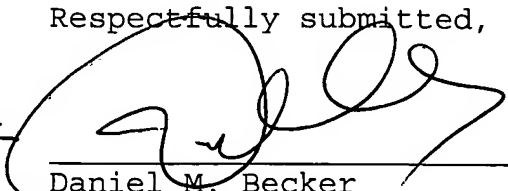
[] a certification as required under 37 C.F.R. § 1.97(e) (1) or § 1.97(e) (2);

[X] the fee as set forth in 37 C.F.R. § 1.17(p).

The Director is hereby authorized to charge payment of any additional fees required in connection with the accompanying Information Disclosure Statement, or credit any overpayment, to Deposit Account No. 06-1075. A duplicate copy of this letter is transmitted herewith.

Respectfully submitted,

18 FEB 2004


Daniel M. Becker
Registration No. 38,376
Attorney for Applicants

FISH & NEAVE
Customer No. 1473
1251 Avenue of the Americas
New York, New York 10020-1104
Tel.: (650) 617-4000

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Signature of Person Signing

2-13-04
Date of Signature



Rev. 04/01

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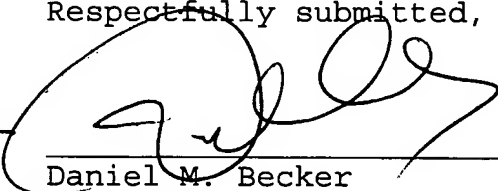
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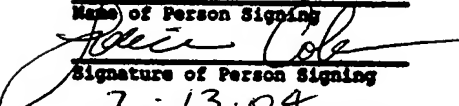

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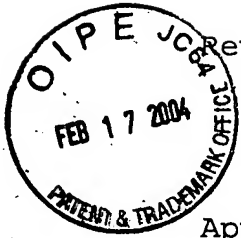
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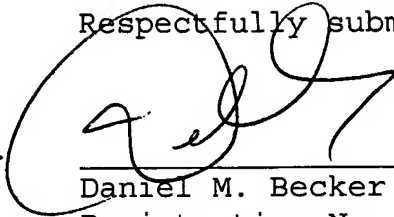
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the first Office Action on the merits.

In accordance with 37 C.F.R. § 1.97, submission
of this Statement requires no fee. However, if for any
reason a fee is due, the Director is hereby authorized to
charge payment of any fees required in connection with this
Information Disclosure Statement to Deposit Account

No. 06-1075. A duplicate copy of this letter is transmitted herewith.

Respectfully submitted,

12 FEB 2004



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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98,
applicants hereby make the following documents of record in
the above identified application:*

U.S. Patents

6,271,360	08/07/01	Metz
6,136,601	10/24/00	Meyer
6,046,380	04/04/00	Clark
6,010,907	01/04/00	Kmiec et al.
6,004,804	12/21/99	Kumar
5,955,363	09/21/99	Lewis
5,912,340	06/15/99	Kutyavin
5,905,185	05/18/99	Garner

* Applicants reserve the right to challenge the status
of any of the cited documents as prior art.

5,801,154	09/01/98	Baracchini
5,731,181	03/24/98	Kmiec
5,565,350	10/15/96	Kmiec
5,422,251	06/06/95	Fresco
5,312,910	05/17/94	Kishore et al.
5,188,642	02/23/93	Shah et al.
4,459,355	07/10/84	Cello et al.
US 2003/0217377	11/20/03	Kmiec et al.
US 2003/0163849	08/08/03	May et al.
US 2003/0051270	03/13/03	Kmiec et al.
US 2002/0119570	08/29/02	Yoon

Foreign Patents

WO 02/26967	04/04/02	PCT
WO 01/92512	12/06/01	PCT
WO 01/87914	11/22/01	PCT
WO 01/73002	10/04/01	PCT
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WO 00/56748	09/28/00	PCT
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Other Documents

Alexeev et al., "Stable and inheritable changes in genotype and phenotype of albino melanocytes induced by an RNA-DNA oligonucleotide," *Nature Biotech.* 16:1343-1346 (1998)

Beetham et al., "A Tool for Functional Plant Genomics: Chimeric RNA/DNA Oligonucleotides Cause *in vivo* Gene-specific Mutations", *Proc. Natl. Acad. Sci. USA*, 96:8774-8778 (1999)

Birnboim et al., "A rapid alkaline extraction procedure for screening recombinant plasmid DNA", *Nucleic Acids Res.* 7:1513-1523 (1979)

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Cole-Strauss et al., "Targeted gene repair directed by the chimeric RNA/DNA oligonucleotide in a mammalian cell-free extract," *Nucl. Acids Res.* 27:1323-1330 (1999)

Cole-Strauss et al., "Correction of the mutation responsible for sickle cell anemia by an RNA-DNA oligonucleotide," *Science* 273:1386-1389 (1996)

Cote et al., "Embryogenic cell suspensions from the male flower to Musa AAA cv. Grand Nain," *Physiol Plant* 97:285-290 (1996)

Crystal, Ronald G., "Transfer of Genes to Humans: Early Lessons and Obstacles to Success," *Science* 270: 404-410 (1995)

Culver et al., "Correction of chromosomal point mutations in human cells with bifunctional oligonucleotides," *Nat. Biotechnol.* 17:989-993 (1999)

Davies et al., "Creation of Mice Expressing Human Antibody Light Chains by Introduction of a Yeast Artificial Chromosome Containing the Core Region of the Human Immunoglobulin K Locus", *Biotechnology* 11:911-914 (1993)

Frary et al., "Efficiency and stability of high molecular weight DNA transformation: an analysis in tomato" *Transgenic Res.* 10:121-132 (2001)

Gamper et al., "A plausible mechanism for gene correction by chimeric oligonucleotides," *Biochemistry* 39(19): 5808-16 (2000)

Gamper et al., "The DNA strand of chimeric RNA/DNA oligonucleotides can direct gene repair/conversion activity in mammalian and plant cell-free extracts," *Nucleic Acids Res.* 28:4332-4339 (2000)

Glazer et al., "DNA Mismatch Repair Detected in Human Cell Extracts", *Mol. Cell. Biol.* 7:218-224 (1987)

Hamilton, "A binary-BAC system for plant transformation with high-molecular-weight DNA", *Gene* 24:107-116 (1997)

Haseloff et al., "Removal of a cryptic intron and subcellular localization of green fluorescent protein are required to mark transgenic *Arabidopsis* plants brightly", *Proc. Natl. Acad. Sci.* 94(6): 2122-7 (1997)

Hohn et al., "Gene therapy in plants," *Proc. Natl. Acad. Sci. USA* 96:8321-8323 (1999)

Holmes et al., "Strand-specific mismatch correction in nuclear extracts of human and drosophila melanogaster cell lines," *Proc. Natl. Acad. Sci. USA* 87:5837-5841 (1990)

Hosoda et al., "An F factor based cloning system for large DNA fragments", *Nucleic Acids Res.* 18:3863 (1990)

Hotta et al., "General recombination mechanisms in extracts of meiotic cells", *Chromasoma* 93:140-151 (1985)

Hu et al., "Expression of *Aequorea* green fluorescent protein in plant cells", *FEBS Lett.* 369(2-3): 331-4 (1995)

Hunger-Bertling et al., "Short DNA fragments induce site specific recombination in mammalian cells," *Molecular and Cellular Biochemistry* 92:107-116 (1990)

Igoucheva et al., "Targeted gene correction by small single-stranded oligonucleotides in mammalian cells," *Gene Therapy* 8:391-399 (2001)

Ioannou et al., "A new bacteriophage P1-derived vector for the propagation of large human DNA fragments", *Nature Genetics* 6:84-89 (1994)

Jessberger et al., "Repair of Deletions and Double-Strand Gaps by Homologous Recombination in a Mammalian In Vitro System", *Mol. Cell. Biol.* 11:445-457 (1991)

Kaji et al., "Gene and Stem Cell Therapies," *JAMA* 285(5): 545-550 (2001)

Kempin et al., "Targeted Disruption in *Arabidopsis*", *Nature* 389:802-803 (1997)

Kmiec et al., "Chloroplast lysates support directed mutagenesis via modified DNA and chimeric RNA/DNA oligonucleotides," *Plant Journal* 27:267-274 (2001)

Kmiec et al., "Targeted gene repair in mammalian cells using chimeric RNA/DNA oligonucleotides," *Cold Spring Harbor Monograph Series* 36: 643-670 (1999)

- Kolodner, "Biochemistry and genetics of eukaryotic mismatch repair", *Genes & Develop* 10:1433-1442 (1996)
- Koshkin et al., "LNA (Locked Nucleic Acid): An RNA Mimic Forming Exceedingly Stable LNAZ: LNA Duplexes", *J. Am. Chem. Soc.* 120:13252-3 (1998)
- Kren et al., "Correction of the UDP-glucuronosyltransferase gene defect in the Gunn rat model of Crigler-Najjar syndrome type I with a chimeric oligonucleotide," *Proc. Natl. Acad. Sci. USA* 96:10349-10354 (1999)
- Kren et al., "In vivo site-directed mutagenesis of the factor IX gene by chimeric RNA/DNA oligonucleotides," *Nature Med.* 4:285-290 (1998)
- Kucherlapati et al., "Homologous Recombination Catalyzed by Human Cell Extracts", *Mol Cell Biol* 5:714-720 (1985)
- Kunzelmann et al., "Gene targeting of CFTR DNA in CF epithelial cells," *Gene Ther.* 3:859-867 (1996)
- Lahue et al., "DNA mismatch correction in a defined system," *Science* 245:160-164 (1989)
- Lai et al., "Homologous recombination-based gene therapy," *Exp. Neph.* 7:11-14 (1999)
- Liu et al., "In vivo gene repair of point and frameshift mutations directed by chimeric RNA/DNA oligonucleotides and modified single-stranded oligonucleotides," *Nucl. Acids Res.* 29(20): 4238-50 (2001)
- Lopez et al., "Directional recombination is initiated at a double strand break in human nuclear extracts", *Nucleic Acids Res.* 20:501-506 (1992)
- Matsuura et al., "Xist expression from an Xist YAC transgene carried on the mouse Y chromosome" *Hum. Mol. Genet* 5:451-459 (1996)
- Mejia et al., "Retrofitting Vectors for *Escherichia coli*-Based Artificial Chromosomes (PACs and BACs) with Markers for Transfection Studies", *Genome Res.* 7:179-186 (1997)
- Moerschell et al., "Transformation of yeast with synthetic oligonucleotides," *Proc. Natl. Acad. Sci. USA* 85:524-528 (1988)
- Muster-Nassal et al., "Mismatch correction catalyzed by cell-free extracts of *Saccharomyces cerevisiae*", *Proc. Natl. Acad. Sci. USA* 83:7618-7622 (1986)
- Drum et al., "Detection of the factor V Leiden mutation by direct allele-specific hybridization of PCR amplicons to photoimmobilized locked nucleic acids," *Clinical Chemistry* 45(11): 1898-1905 (1999)

- Peterson et al., "Production of transgenic mice with yeast artificial chromosomes", *Trends Genet* 13:61 (1997)
- Peterson et al., "Effect of deletion of 5'HS3 or 5'HS2 of the human β -globin locus control region on the developmental regulation of globin gene expression in β -globin yeast artificial chromosome transgenic mice", *Proc. Natl. Acad. Sci.* 93:6605-6609 (1996)
- Rando et al., "Rescue of dystrophin expression in *mdx* mouse muscle by RNA/DNA oligonucleotides," *Proc. Natl. Acad. Sci. USA* 97:5363-5368 (2000)
- Rice et al., "The potential of nucleic acid repair in functional genomics," *Nature Biotech.* 19(4): 321-26 (2001)
- Rouwendal et al., "Enhanced expression in tobacco of the gene encoding green fluorescent protein by modification of its codon usage", *Plant Mol. Biol.* 33(6):989-99 (1997)
- Santisteban et al., "Three new adenosine deaminase mutations that define a splicing enhancer and cause severe and partial phenotypes: Implications for evolution of a CpG hotspot and expression of a transduced ADA cDNA," *Human Molec. Genetics* 4(11): 2081-87 (1995)
- Sayers et al., "5'-3' Exonucleases in Phosphorothioate-based Oligonucleotide-directed Mutagenesis," *Nucleic Acids Research* 16(3): 791-801 (1988)
- Schedl et al., "Influence of PAX6 gene Dosage on Development: Overexpression Causes Severe Eye Abnormalities", *Cell* 86:71-82 (1996)
- Shizuya et al., "Cloning and stable maintenance of 300-kilobase-pair fragments of human DNA in *Escherichia coli* using an F-factor-based vector", *Proc. Natl. Acad. Sci.* 89:8794-8797 (1992)
- Sternberg et al., "Bacteriophage P1 cloning for the isolation, amplification, and recovery of DNA fragments as large as 100 kilobase pairs", *Proc. Natl. Acad. Sci. USA* 87:103-107 (1990)
- Thomas et al., "Heteroduplex Repair in Extracts of Human HeLa Cells", *J. Biol. Chem* 266:3744-3751 (1991)
- Umar et al., "Defective Mismatch Repair in Extracts of Colorectal and Endometrial Cancer Cell lines Exhibiting Microsatellite Instability", *J. Biol. Chem* 269:14367-14370 (1994)
- Varlet et al., "DNA mismatch repair in *Xenopus* egg extracts: Repair efficiency and DNA repair synthesis for all single base-pair mismatches", *Proc. Natl. Aca. Sci. USA* 87:7883-7887 (1990)
- Vasquez et al., "Specific mutations induced by triplex-forming oligonucleotides in mice," *Science* 290:530-532 (2000)

Vasquez et al., "Chromosomal mutations induced by triplex-forming oligonucleotides in mammalian cells," *Nucl. Acids Res.* 27:1176-1181 (1999)

Verma et al., "Gene Therapy- Promises, Problems, and Prospects," *Nature* 389: 239-242 (1997)

Woolf et al., "Toward the therapeutic editing of mutated RNA sequences," *Proc. Natl. Acad. Sci. USA* 92: 8298-8302 (1995)

Xu et al., "Activation of human γ -globin gene expression via triplex-forming oligonucleotide (TFO)-directed mutations in the γ -globin gene 5' flanking region," *Gene* 242:219-228 (2000)

Yamamoto et al., "Strand-specificity in the transformation of yeast with synthetic oligonucleotides," *Genetics* 131:811-819 (1992)

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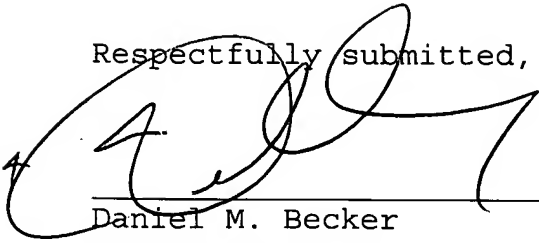
Copies of the aforementioned documents, which are listed on the accompanying Form PTO-1449, are enclosed herewith.

It is respectfully requested that these documents be (1) fully considered by the Patent and Trademark Office during the examination of this application; and (2) printed on any patent that may issue on this application. Applicants request that a copy of Form PTO-1449, as considered and initialed by the Examiner, be returned with the next communication.

An early and favorable action is respectfully requested.

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12 FEB 2004


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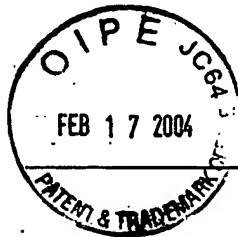
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	US 2003/0051270	03/13/03	Kmiec et al.			
	US 2002/0119570	08/29/02	Yoon			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 02/26967	04/04/02	PCT				
	WO 01/92512	12/06/01	PCT				
	WO 01/87914	11/22/01	PCT				
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	WO 01/24615	04/12/01	PCT				

EXAMINER

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	WO 99/58723	11/18/99	PCT				
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	2 326 163	12/16/98	GB				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
	Alexeev et al., "Stable and inheritable changes in genotype and phenotype of albino melanocytes induced by an RNA-DNA oligonucleotide," <i>Nature Biotech.</i> 16:1343-1346 (1998)
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	Birnboim et al., "A rapid alkaline extraction procedure for screening recombinant plasmid DNA", <i>Nucleic Acids Res.</i> 7:1513-1523 (1979)
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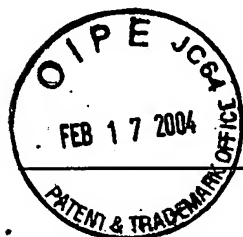
EXAMINER INITIAL	
	Cole-Strauss et al., "Correction of the mutation responsible for sickle cell anemia by an RNA-DNA oligonucleotide," <i>Science</i> 273:1386-1389 (1996)
	Cote et al., "Embryogenic cell suspensions from the male flower to Musa AAA cv. Grand Nain," <i>Physiol Plant</i> 97:285-290 (1996)
	Crystal, Ronald G., "Transfer of Genes to Humans: Early Lessons and Obstacles to Success," <i>Science</i> 270: 404-410 (1995)
	Culver et al., "Correction of chromosomal point mutations in human cells with bifunctional oligonucleotides," <i>Nat. Biotechnol.</i> 17:989-993 (1999)
	Davies et al., "Creation of Mice Expressing Human Antibody Light Chains by Introduction of a Yeast Artificial Chromosome Containing the Core Region of the Human Immunoglobulin K Locus", <i>Biotechnology</i> 11:911-914 (1993)
	Frary et al., "Efficiency and stability of high molecular weight DNA transformation: an analysis in tomato" <i>Transgenic Res.</i> 10:121-132 (2001)
	Gamper et al., "A plausible mechanism for gene correction by chimeric oligonucleotides," <i>Biochemistry</i> 39(19): 5808-16 (2000)
	Gamper et al., "The DNA strand of chimeric RNA/DNA oligonucleotides can direct gene repair/conversion activity in mammalian and plant cell-free extracts," <i>Nucleic Acids Res.</i> 28:4332-4339 (2000)
	Glazer et al., "DNA Mismatch Repair Detected in Human Cell Extracts", <i>Mol. Cell. Biol.</i> 7:218-224 (1987)
	Hamilton, "A binary-BAC system for plant transformation with high-molecular-weight DNA", <i>Gene</i> 24:107-116 (1997)
	Haseloff et al., "Removal of a cryptic intron and subcellular localization of green fluorescent protein are required to mark transgenic <i>Arabidopsis</i> plants brightly", <i>Proc. Natl. Acad. Sci.</i> 94(6): 2122-7 (1997)
	Hohn et al., "Gene therapy in plants," <i>Proc. Natl. Acad. Sci. USA</i> 96:8321-8323 (1999)
	Holmes et al., "Strand-specific mismatch correction in nuclear extracts of human and drosophila melanogaster cell lines," <i>Proc. Natl. Acad. Sci. USA</i> 87:5837-5841 (1990)
	Hosoda et al., "An F factor based cloning system for large DNA fragments", <i>Nucleic Acids Res.</i> 18:3863 (1990)
	Hotta et al., "General recombination mechanisms in extracts of meiotic cells", <i>Chromasoma</i> 93:140-151 (1985)
	Hu et al., "Expression of <i>Aequorea</i> green fluorescent protein in plant cells", <i>FEBS Lett.</i> 369(2-3): 331-4 (1995)

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DATE CONSIDERED

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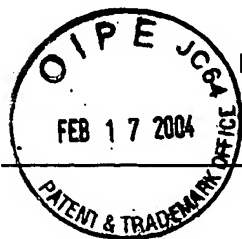
EXAMINER INITIAL	
	Hunger-Bertling et al., "Short DNA fragments induce site specific recombination in mammalian cells," <i>Molecular and Cellular Biochemistry</i> 92:107-116 (1990)
	Igoucheva et al., "Targeted gene correction by small single-stranded oligonucleotides in mammalian cells," <i>Gene Therapy</i> 8:391-399 (2001)
	Ioannou et al., "A new bacteriophage P1-derived vector for the propagation of large human DNA fragments," <i>Nature Genetics</i> 6:84-89 (1994)
	Jessberger et al., "Repair of Deletions and Double-Strand Gaps by Homologous Recombination in a Mammalian In Vitro System," <i>Mol. Cell. Biol.</i> 11:445-457 (1991)
	Kaji et al., "Gene and Stem Cell Therapies," <i>JAMA</i> 285(5): 545-550 (2001)
	Kempin et al., "Targeted Disruption in <i>Arabidopsis</i> ," <i>Nature</i> 389:802-803 (1997)
	Kmiec et al., "Chloroplast lysates support directed mutagenesis via modified DNA and chimeric RNA/DNA oligonucleotides," <i>Plant Journal</i> 27:267-274 (2001)
	Kmiec et al., "Targeted gene repair in mammalian cells using chimeric RNA/DNA oligonucleotides," <i>Cold Spring Harbor Monograph Series</i> 36: 643-670 (1999)
	Kolodner, "Biochemistry and genetics of eukaryotic mismatch repair," <i>Genes & Develop</i> 10:1433-1442 (1996)
	Koshkin et al., "LNA (Locked Nucleic Acid): An RNA Mimic Forming Exceedingly Stable LNAZ: LNA Duplexes," <i>J. Am. Chem. Soc.</i> 120:13252-3 (1998)
	Kren et al., "Correction of the UDP-glucuronosyltransferase gene defect in the Gunn rat model of Crigler-Najjar syndrome type I with a chimeric oligonucleotide," <i>Proc. Natl. Acad. Sci. USA</i> 96:10349-10354 (1999)
	Kren et al., "In vivo site-directed mutagenesis of the factor IX gene by chimeric RNA/DNA oligonucleotides," <i>Nature Med.</i> 4:285-290 (1998)
	Kucherlapati et al., "Homologous Recombination Catalyzed by Human Cell Extracts," <i>Mol Cell Biol</i> 5:714-720 (1985)
	Kunzelmann et al., "Gene targeting of CFTR DNA in CF epithelial cells," <i>Gene Ther.</i> 3:859-867 (1996)
	Lahue et al., "DNA mismatch correction in a defined system," <i>Science</i> 245:160-164 (1989)
	Lai et al., "Homologous recombination-based gene therapy," <i>Exp. Neph.</i> 7:11-14 (1999)
	Liu et al., "In vivo gene repair of point and frameshift mutations directed by chimeric RNA/DNA oligonucleotides and modified single-stranded oligonucleotides," <i>Nucl. Acids Res.</i> 29(20): 4238-50 (2001)
	Lopez et al., "Directional recombination is initiated at a double strand break in human nuclear extracts," <i>Nucleic Acids Res.</i> 20:501-506 (1992)

EXAMINER

DATE CONSIDERED

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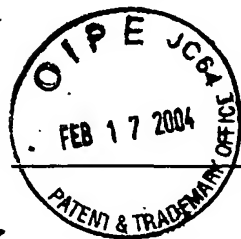
EXAMINER INITIAL	
	Matsuura et al., "Xist expression from an Xist YAC transgene carried on the mouse Y chromosome" <i>Hum. Mol. Genet</i> 5:451-459 (1996)
	Mejia et al., "Retrofitting Vectors for <i>Escherichia coli</i> -Based Artificial Chromosomes (PACs and BACs) with Markers for Transfection Studies", <i>Genome Res.</i> 7:179-186 (1997)
	Moerschell et al., "Transformation of yeast with synthetic oligonucleotides," <i>Proc. Natl. Acad. Sci. USA</i> 85:524-528 (1988)
	Muster-Nassal et al., "Mismatch correction catalyzed by cell-free extracts of <i>Saccharomyces cerevisiae</i> ", <i>Proc. Natl. Acad. Sci. USA</i> 83:7618-7622 (1986)
	Ørum et al., "Detection of the factor V Leiden mutation by direct allele-specific hybridization of PCR amplicons to photoimmobilized locked nucleic acids," <i>Clinical Chemistry</i> 45(11): 1898-1905 (1999)
	Peterson et al., "Production of transgenic mice with yeast artificial chromosomes", <i>Trends Genet</i> 13:61 (1997)
	Peterson et al., "Effect of deletion of 5'HS3 or 5'HS2 of the human β -globin locus control region on the developmental regulation of globin gene expression in β -globin yeast artificial chromosome transgenic mice", <i>Proc. Natl. Acad. Sci.</i> 93:6605-6609 (1996)
	Rando et al., "Rescue of dystrophin expression in <i>mdx</i> mouse muscle by RNA/DNA oligonucleotides," <i>Proc. Natl. Acad. Sci. USA</i> 97:5363-5368 (2000)
	Rice et al., "The potential of nucleic acid repair in functional genomics," <i>Nature Biotech.</i> 19(4): 321-26 (2001)
	Rouwendal et al., "Enhanced expression in tobacco of the gene encoding green fluorescent protein by modification of its codon usage", <i>Plant Mol. Biol.</i> 33(6):989-99 (1997)
	Santisteban et al., "Three new adenosine deaminase mutations that define a splicing enhancer and cause severe and partial phenotypes: Implications for evolution of a CpG hotspot and expression of a transduced ADA cDNA," <i>Human Molec. Genetics</i> 4(11): 2081-87 (1995)
	Sayers et al., "5'-3' Exonucleases in Phosphorothioate-based Oligonucleotide-directed Mutagenesis," <i>Nucleic Acids Research</i> 16(3): 791-801 (1988)
	Schedl et al., "Influence of <i>PAX6</i> gene Dosage on Development: Overexpression Causes Severe Eye Abnormalities", <i>Cell</i> 86:71-82 (1996)
	Shizuya et al., "Cloning and stable maintenance of 300-kilobase-pair fragments of human DNA in <i>Escherichia coli</i> using an F-factor-based vector", <i>Proc. Natl. Acad. Sci.</i> 89:8794-8797 (1992)
	Sternberg et al., "Bacteriophage P1 cloning for the isolation, amplification, and recovery of DNA fragments as large as 100 kilobase pairs", <i>Proc. Natl. Acad. Sci. USA</i> 87:103-107 (1990)
	Thomas et al., "Heteroduplex Repair in Extracts of Human HeLa Cells", <i>J. Biol. Chem</i> 266:3744-3751 (1991)

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EXAMINER INITIAL	
	Umar et al., "Defective Mismatch Repair in Extracts of Colorectal and Endometrial Cancer Cell lines Exhibiting Microsatellite Instability", <i>J. Biol. Chem</i> 269:14367-14370 (1994)
	Varlet et al., "DNA mismatch repair in <i>Xenopus</i> egg extracts: Repair efficiency and DNA repair synthesis for all single base-pair mismatches", <i>Proc. Natl. Aca. Sci. USA</i> 87:7883-7887 (1990)
	Vasquez et al., "Specific mutations induced by triplex-forming oligonucleotides in mice," <i>Science</i> 290:530-532 (2000)
	Vasquez et al., "Chromosomal mutations induced by triplex-forming oligonucleotides in mammalian cells," <i>Nucl. Acids Res.</i> 27:1176-1181 (1999)
	Verma et al., "Gene Therapy- Promises, Problems, and Prospects," <i>Nature</i> 389: 239-242 (1997)
	Woolf et al., "Toward the therapeutic editing of mutated RNA sequences," <i>Proc. Natl. Acad. Sci. USA</i> 92: 8298-8302 (1995)
	Xu et al., "Activation of human γ -globin gene expression via triplex-forming oligonucleotide (TFO)-directed mutations in the γ -globin gene 5' flanking region," <i>Gene</i> 242:219-228 (2000)
	Yamamoto et al., "Strand-specificity in the transformation of yeast with synthetic oligonucleotides," <i>Genetics</i> 131:811-819 (1992)
	Yanez et al., "Therapeutic gene targeting," <i>Gene Therapy</i> 5:149-159 (1998)

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